

The Falkland Islands are surrounded by four major sedimentary basins: the Falkland Plateau Basin to the east, the South Falkland Basin to the south, the Malvinas Basin to the west, and the North Falkland Basin to the north. The four main basins appear to have formed initially as Triassic through earliest Cretaceous extensional rifts associated with the break-up of Gondwana. A ?Valanginian end to rifting was followed by thermal sag. There is evidence of Cenozoic uplift in at least the North Falkland Basin, possibly coincident with Andean compression and the development of overthrusting along the plate boundary to the south of the islands resulting from opening of the Scotia Sea. There is no evidence from offshore seismic and gravity-magnetic data to support interpretations that the Falkland Islands have rotated clockwise through up to 180° during Gondwana separation. With the exception of the South Falkland Basin all the major basins probably underwent initially, more or less east-west extension, and had a similar orientation to adjacent South American and western southern African basins. The Falkland basins probably shared a similar geological history with the offshore southern African and South American basins.